TL201/VT108 GPS Tracker GPRS Protocol (Version 5.0)

Data format from software to tracker

:123456Command,Data#
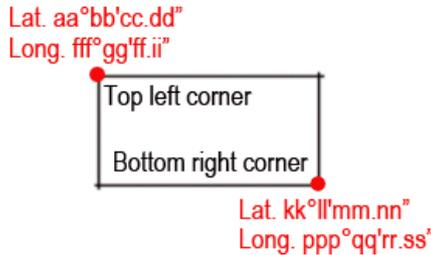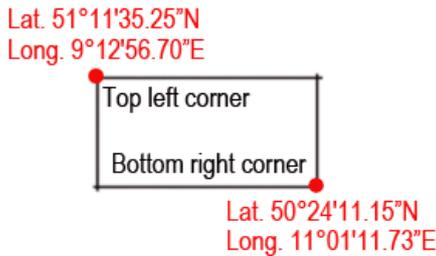
:	Header
123456	Password, the default password is 123456
Command	"A1"　Set authorized numbers "A2"　Set authorized numbers "A3"　Set authorized numbers "A4"　Set authorized numbers "A5"　Set authorized numbers "F"　　Locate one time "M"　Set continuous tracking "J"　　Set the Speeding alarm "I"　　Set GEO fence "L"　Set the time zone "N"　Set low battery alarm "H"　Modify the password "T1" Cut off the ACC or fuel(Open the relay),only available for VT108 "T0" recover ACC or fuel(Close the relay), only available for VT108 "U1" Switch to the listen in mode, only available for VT108 "U0" Switch to the talk mode, only available for VT108 "C"　Set the APN,IP&Port "O"　Set the user name and password for APN
Data	It depends on the command, and it will be null in some commands
#	Ending

Example

:123456H456789#

Details of all the sentences from software to tracker. The default password is 123456.

Name	Sentence content	Description
Set authorized numbers	**:123456A1,phone number#** **:123456A2,phone number#** **:123456A3,phone number#** **:123456A4,phone number#** **:123456A5,phone number#**	For TL201: A1,A2,A3 is for setting the 3 SOS numbers.A4 is for CALL1 number.A5 is for CALL 2 number. For VT108: A1,A2,A3 is for setting the 3 SOS numbers.A4 is for the call center number Phone number must include the country code like +8613812345678. +86 is the country code of China. Please do not use 00 instead of +
Sample of setting authorized numbers	**:123456A1,+8613812345678#**	Set +8613812345678 as the first SOS number.
Delete authorized numbers	**:123456A1,D#** **:123456A2,D#** **:123456A3,D#** **:123456A4,D#** **:123456A5,D#**	For TL201: A1,A2,A3 is for setting the 3 SOS numbers.A4 is for CALL1 number.A5 is for CALL 2 number. For VT108 : A1,A2,A3 is for setting the 3 SOS numbers.A4 is for the call center number
Locate one time	**:123456F#**	The tracker will reply the position for one time
Set continuous tracking	**:123456Mx,yyyz#**	x=1 means on, x=0 means off yyy means time interval.If z=S/M

		it should be <=255.if z=H, it should be<=090. It must be three numbers,030Smeans 30S Z means time unit，z=S means second, z=M means minute, z=H means hour
Sample of Setting continuous tracking	**:123456M1,030S#**	The tracker will reply the position according to the time interval you set.
Set the speeding alarm	**:123456Jx,yyy#**	x=1 neans on,x=0 means off yyy means the alarm speed, it should be<250 and must three digital, e.g. 080=80km/h.
Sample of setting speeding alarm	**:123456J1,080#**	The tracker will send a speeding alarm to server if it is over the 80km/h
Set GEO fence	**:123456Ix,y,z, aabbccddefffgghhiijkkllmmnnepppqqrrssj#** Lat. aa°bb'cc.dd" Long. fff°gg'ff.ii" Top left corner Bottom right corner Lat. kk°ll'mm.nn" Long. ppp°qq'rr.ss"	x=NO. of the GEO-fence(1-5),5 GEO fence can be set y=1 means on, y=0 means off z=0 means go in, z=1 means go out e=N means the north latitude, e=S means the south latitude j=E means the east longitude, j=W means the west longitude aa,bb,cc,dd,kk,ll,mm,nn,qq,rr,ss must be 2 numbers.03 means 3. fff,ppp must be 3 numbers.011 means 11
Example of setting GEO fence	**:123456I1,1,1,51113525N009125670E50241115N011011173E#** Lat. 51°11'35.25"N Long. 9°12'56.70"E Top left corner Bottom right corner Lat. 50°24'11.15"N Long. 11°01'11.73"E	The tracker will send an alarm data when it in/out the district.
Set the time zone	**:123456Lxyy#**	x=+ means east x=- means west yy means the time zone，must be 2 numbers
Sample of setting the time zone	**:123456L+08#**	Set the +08 time zone
Set the low battery alarm	**:123456Nx,yy#**	x=1 means on,x=0 means off yy means battery lower then yy% then send the alarm.It must be<45.it must be 2 numbers.
Sample of setting the low battery alarm	**:123456N1,40#**	The tracker will send a low battery alarm if the battery is lower then 40%
Modify the password	**:123456H456789#**	456789 is the new password, new password must be 6 numbers

cut off the ACC or fuel	:123456T1#	The car can not started, only available for VT108
recover ACC or fuel	:123456T0#	The car can be started, only available for VT108
Switch to the listen in mode	:123456U1#	The tracker will pick up the incoming call then the call center can talk to the driver.
Switch to the talk mode	:123456U0#	The tracker will pick up the incoming call then the call center can hear the sound around the car.
Set the APN,IP and port	:123456C$$$$,IP:Port#	$$$$ is the APN, you can get the APN from your local GSM provider.
Sample of setting the APN	:123456CCMNET, 119.122.101.91:7289#	CMNET is the APN of China mobile.
Set the username and password for APN	:123456O&&&&, @@@@#	&&&& is the username and @@@@ is the password. If the SIM card did not need username and password for the APN, you do not need to set it.
Sample of setting the username and password for APN	:123456Ointernet,internet123#	The user name is internet and the password is internet123.

Data format from tracker to software
#IMEI, Type, A/V, Date, Time, Latitude, Longitude, Speed, Status, Others#

#	Header
IMEI	The IMEI of the tracker, it can be used as the tracker ID
Type	"CMD-A1" reply for A1 command, set the authorized number. "CMD-A2" reply for A2 command, set the authorized number. "CMD-A3" reply for A3 command, set the authorized number. "CMD-A4" reply for A4 command, set the authorized number. "CMD-A5" reply for A5 command, set the authorized number. "CMD-F" reply for F command, Locate one time "CMD-T" continuous tracking "CMD-J" reply for J command, Set speeding alarm "CMD-I" reply for I command, Set GEO fence "CMD-L " reply for L command, Set the time zone "CMD-N" reply for N command, Set low battery alarm "CMD-H" reply for H command, Modify the password "CMD-T1" reply for T1 command, Recover ACC or engine "CMD-T0" reply for T0 command, Cut the ACC or engine "CMD-U1" reply for U1 command, Switch to the listen in mode "CMD-U0" reply for U0 command, Switch to the talk mode "CMD-C" reply for C command, Set the APN,IP and port "CMD-O" reply for O command, Set the username and password for the APN. "CMD-X" Heartbeat data, it will send this data to keep the connection with the server if no data communicate between the tracker and server for a long time. "ALM-A" SOS alarm "ALM-B" GEO alarm "ALM-C" Speeding alarm "ALM-D" Low-battery alarm "ERROR!" Setting unsuccessful, means you did you send the sentences in the correct format
A/V	A=GPS had Fixed V=GPS not fixed
Date	Date of GPS fix, in the format of YYMMDD. It will be UTC if you did not set the time zone. It can be null if GPS not fix.
Time	Time of GPS fix, in the format of HHMMSS. It will be UTC if you did not set the time zone. It

	can be null if GPS not fix.
Latitude	The format is dd.dddddddN/S. It can be null if GPS not fix.
Longitude	The format is ddd.dddddddE/W. It can be null if GPS not fix.
Speed	Speed in km/h. It can be null if GPS not fix.
Status	For TL201: In the format of XX-YY.XX means the battery, the top is 100.YY means the GSM signal, the top is 31. For VT108: In the format of A-B-C-XX-YY.A=1 means ACC on, A=0 means ACC off. B=1 means tracker get power for the car battery, B=0 means tracker lose power from car battery. C=1 means door open, C=0 means door close. XX means the battery, the top is 100.YY means the GSM signal, the top is 31.
Direction	Indicates the current direction of travel over
#	Ending

Example for TL201
#353327020115804,CMD-T,A,DATE:090329,TIME:223252,LAT:22.7634066N,LOT:114.3964783E,Speed:000.0,84-20,000#

Example for VT108
#353327020115804,CMD-T,A,DATE:090329,TIME:223252,LAT:22.7634066N,LOT:114.3964783E,Speed:000.0,1-1-0-84-20,000#